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ABSTRACT

This interim report presents the framework for classifying competency-based initiatives developed by the NPEC (National Postsecondary Education Cooperative) Working Group. Section 1 presents a structure for classifying competency initiatives based upon student progression into, within, and from postsecondary education. Key applications of competency definitions and assessment considered by the Working Group occur at intersections or transition points in the schematic. Section 2 presents the Working Group's current thinking with regard to defining, assessing, and applying competencies. Section 3 describes progress made in preparing an annotated bibliography of competency-based initiatives. Section 4 discusses the design of case studies that are being carried out to analyze current practices in assessing and using competencies in postsecondary education. Section 5 presents data and process issues (with sub-issues) identified by the Working Group in the form of criteria or a check list to assist institutions planning or implementing a competency-based initiative. Data issues are the following: (1) the level at which competencies are defined; (2) linking issues; (3) comprehensiveness issues; (4) measurement issues; (5) data maintenance and reporting issues; and (6) portability issues. These are process issues: (1) development processes; (2) involvement processes; (3) training; (4) implementation; and (5) costs. The case study protocol is appended. (YLB)

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Interim Report of the Working Group

December 1999

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Data Ramifications of Competency-Based Initiatives

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Data Ramifications of Competency-Based Initiatives

Interim Report of the Working Group

Background

In 1997 the NPEC Working Group examining data needs related to workforce development policies noted an increased emphasis being placed by many on the national scene on skill standards, competency-based credentials, and assessment of work-based learning experiences, and recommended the establishment of a project focused upon the data ramifications of competency-based initiatives. At its meeting in January 1998 the NPEC Steering Committee approved a new Working Group and asked it to analyze current practices in defining and assessing learner competencies and to determine their utility in a variety of policy contexts.

At its first meeting on September 17 and 18, 1998 members of the Working Group presented their experiences with a wide range of different competency-based projects and activities including: competency-based admissions processes; linking skills with job requirements; developing career transcripts; assessing critical thinking and writing skills; defining workforce development performance measures; and carrying out assessments at different points in the learning process. The Working Group discussed purposes, principles, pitfalls, and processes for defining and assessing competencies, and concluded that future directions should involve an examination of the state-of-current-practices and more in-depth analyses based upon case studies.

This Interim Report presents the framework for classifying competency-based initiatives that has been developed by the Working Group as well as key concepts and definitions that evolved as applications of competencies in a wide range of policy contexts were considered. This report also describes progress that has been made in preparing an annotated bibliography of competency-based initiatives and the design of case studies that are being carried out to analyze current practices in assessing and utilizing competencies in postsecondary education.

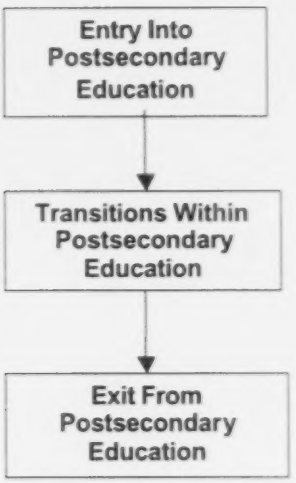
Defining and Classifying Competency-Based Initiatives

At each of its first three meetings the Working Group has discussed some fundamental, questions: What is competence? Why is it important to assess competence? How are assessments used in making decisions and developing policy? The concepts resulting from these deliberations are presented in the next section of this report. The Working Group relied upon the wide range of experiences reflected in it membership to develop a "first cut" definition of the scope of competency-based initiatives and used that definition to guide the compilation of an annotated bibliography of competency-based initiatives. The Working Group also pursed its charge to "analyze current practices in defining and assessing learner competencies and to determine their utility in a variety of policy contexts" by conducting a series of case studies.

Utilizing its collective experiences and a first draft of the bibliography prepared by its consultant, the Working Group developed a structure for classifying competency initiatives based upon student progression into, within, and from postsecondary education. Key applications of competency definitions and assessment that have been considered by the Working Group occur at intersections or transition points in the following schematic.

Figure 1

Intersections for Consideration of Competencies in Postsecondary Education


Entry Into Postsecondary Education
Transitions Within Postsecondary Education
Exit From Postsecondary Education

The elements of this classification structure where competencies become important in a policy or decision-making context are: upon entry into postsecondary education, at points of transition within postsecondary education, upon exit from postsecondary education and in assessing the overall effectiveness of postsecondary education. These elements define the scope of the competency-based initiatives project. The competency initiatives considered by the Working Group within each of these areas are:

Entry Into Postsecondary Education

(1) Competency-Based Admissions
(2) Competency-Based Placement in Classes

Within Postsecondary Education

(3) Competency-Based Curricula in Specific Disciplines
(4) General Education Competencies
(5) Competencies at Transfer Within a Single PSE Provider (e.g., change of majors)

(6) Competencies at Transfer Across Multiple PSE Providers (e.g., from one institution to another)

Exit from Postsecondary Education

(7) End of Program Competencies
(8) Postsecondary to Employment (Work Place Competencies)
(9) Postsecondary to Graduate/Professional School

Overall Institutional Effectiveness

(10) Internal (Program Improvement)
(11) External (Accountability, Performance Budgeting, Accreditation)

The Working Group plans to continue to refine this framework, and to use it as the basic classification structure for the annotated bibliography and for selecting and carrying out case studies of competency-based initiatives. At this point the Working Group views the structure as the basis for defining links across the activities carried out within the project. This structure also parallels the work of the NPEC Student Transitions project.

Key Concepts and Definitions

Since its first meeting the Working Group has struggled with the question of "what is competence?" And, the related questions such as "In what ways are competencies different from, or the same as, learning outcomes?" "What is the relationship between the functions of defining competency, assessing competency and judging competency according to some standard?" That struggle with definitions, terminology and concepts continues. This section of the interim report presents the current thinking of the Working Group with regard to defining, assessing and applying competencies.

Defining Competencies

Educators use many terms interchangeably to describe learners and the results of the learning process including: outcomes, skills, traits, characteristics, competencies, and domains. Although the boundaries and meanings among these words frequently are blurred, it is important to strive for a clear definition of what is meant by competence.

The Working Group suggests that competencies sit atop the apex of a hierarchy of experiences that have currency for the learner. Figure 2 depicts the language structure the Working Group has developed to differentiate among terms that appear to be used synonymously elsewhere in the literature.

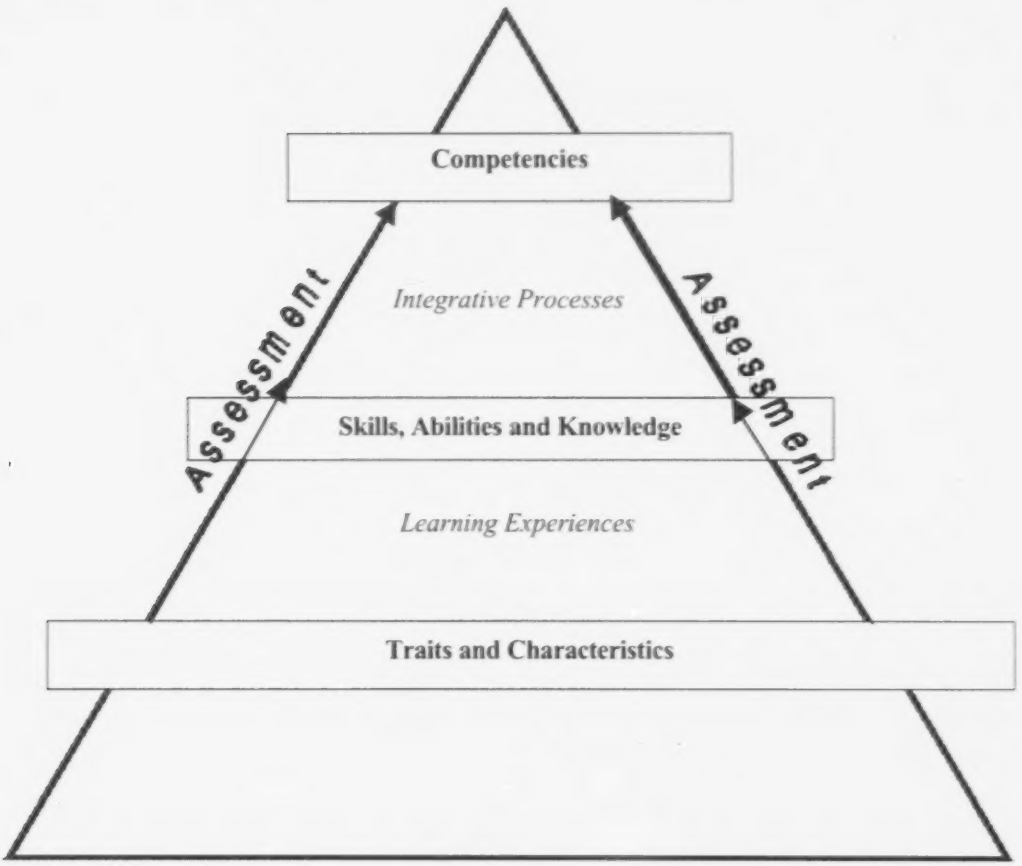
Traits and Characteristics: are the foundation for learning, the innate make-up of individuals on which further experiences can be built. Differences in traits and characteristics help explain why people pursue different learning experiences and acquire different levels and kinds of knowledge and skills.

Skills, Abilities and Knowledge: are developed through learning experiences, broadly defined to include work, participation in community affairs, etc. (although the Competency-

Based Initiatives project is focusing on formally organized postsecondary education learning processes).

Competencies: Are the result of integrative processes in which skills, abilities, and knowledge interact to form bundles which have currency in relation to the task for which they are assembled.

Figure 2



Characteristics of Competencies

Skills, abilities, knowledge and competencies are often used interchangeably. For example, we speak of competent machinists and highly skilled machinists; competent mathematicians and knowledgeable mathematicians. Figure 2 presents a hierarchy to differentiate these terms: skills and knowledge are acquired through learning experiences; different combinations of skills and knowledge that one has acquired define the competencies that an

individual possesses; different combinations of competencies that are possessed by an individual are combined in carrying out different tasks.

The term "outcomes of postsecondary education" encompasses the skills and knowledge acquired in the learning process. However, the outcomes of postsecondary education are broader than knowledge and skills and include psychosocial development; attitudes, values and beliefs; and civic development (See Table 2: A Taxonomy of Student Outcomes in Terenzini[1]). The term "outcomes" also encompasses proxies for skills, knowledge and abilities including the completion of a degree or course, grades and GPA, certifications, employment and salary, etc. The full scope of outcomes also include those that accrue to postsecondary participants over long time frames, such as better health and the economic benefits passed on to their children.

Competencies are a combination of skills, abilities and knowledge. Fro example, knowledge of the relationship between voltage, resistance and amperage (i.e., knowledge of Ohm's Law, whether put in those terms or not) and skills in soldering and splicing wires, are among those needed to be a competent electrician.

A given competency can be used in many different ways. For example, measuring distances is important to both professional golfers and surveyors. Of course, different distance measuring skills may be involved in carrying out these two tasks.

Competencies have utility in the context of a task. That is, a person may have great hand-eye coordination, knowledge of the rules of baseball, and skill in mixing just the right combination of gin, vermouth and bitters, but there is no task that uses this particular combination of skills, abilities and knowledge. However, substitute batting skills for making martinis and we may have the competence needed to play the position of shortstop.

Competence in different contexts requires different bundles of skills and knowledge. Leadership in a surgery suite is different from leadership on the basketball court. For example, motivating teammates is more important to leadership in basketball, while superior knowledge of the procedure is more important to leadership in surgery; but, an ability to effectively coordinate the roles, timing and contributions of co-workers is important to leadership in both contexts. The bundles of different skills and knowledge which are given the same label in different contexts is one reason that there is often difficulty in achieving a common understanding of what a given competency (like leadership) is, and then what it means to assess it.

Knowing how to package the right set of competencies to effectively carry out a given task is in itself a competency. We sometimes refer to individuals as having great skills but are unable to apply them. With experience and experiment people combine gestures, phrases, eye contact, pace of speech, etc. in ways that allow them to give better speeches.

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[1] Terenzini, Patrick T. "Student Outcomes Information for Policy Making," NPEC, September, 1997.

Using Competencies[2]

Competency-based initiatives seek to insure that students attain specific skills, knowledge and abilities considered important with respect to whatever they are studying or the transitions for which they are preparing.

Utilizing competencies requires the development of three distinct, but interactive components: a description of the competency; a means of measuring or assessing the competency; and a standard by which someone is judged to be competent. The following are examples illustrating these components in selected areas within the classification structure presented above:

Entry Into Postsecondary Education (Competency-Based Admissions)

- Defining competencies: often done by "curriculum panels" of faculty and teachers
- Assessing competencies: various methods are used including tests; teacher ratings using scoring guides; and evaluation of student work samples
- Standards for judging competence: often set by a "master panel" of secondary and postsecondary faculty

Exit from Postsecondary Education-Postsecondary to Employment (Certification and Licensure)

- Defining competencies: Usually done by members of the profession with a "public protection" perspective
- Assessing competencies: various methods used including licensing exams, completion of accredited programs, successful experience in specified levels of practice
- Standards for judging competence: established in practice laws or certifications that have credibility with employers

Competency-based initiatives can be important in communicating to students which competencies are important for them to attain; and the extent to which their learning experiences/efforts are meeting these expectations (i.e., the student as a consumer of information about competencies).

Competency-based initiatives also can be important in communicating what people know and are able to do to employers or the general public (i.e., audiences external to the student as a consumer of information about competencies).

Thus, a primary advantage of using competency definitions, assessments and standards is the process of identifying which competencies are important for students to attain, and the quality assurance that students actually attain them. In this context competencies provide a common language or "coin of the realm."

Difficulties are encountered as different groups use the same term for different competencies; or conversely, different standards for assessing the same competencies.

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[2] This section draws heavily upon a communication to the Working Group from Joy McClarty in March 1999.

Both undermine efforts to develop a common language and subsequently the utility of competency-based initiatives as a means of communicating with students, employers and the general public.

Assessments can be carried out at any of the levels of the hierarchy shown in Figure 2. That is, the acquisition of skills and knowledge can be assessed; and similarly, the possession of competencies, and the performance of tasks involving the application of competencies, can be assessed.

The case studies being carried out by the Working Group are examining how competency is being defined, measured or assessed, and applied utilizing standards for judging competence in the wide range of areas reflected in the classification framework developed by the Working Group.

The Annotated Bibliography

Project consultants have prepared an annotated bibliography that covers the full scope of competency-based initiatives that are encompassed by the classification framework developed by the Working Group. However, the bibliography is not "exhaustive, rather it is "illustrative." The bibliography focuses on the points of transition reflected in the classification framework and on how competencies are defined and measured.

The consultants have also prepared a lead-in to the bibliography stating its purpose, what it is (representative of the full scope of competency applications) and isn't (comprehensive), and how entries were selected. Similarly, a brief introduction to each section (sub-section) of the bibliography summarizes what is encompassed, relevant history, and extent of applications.

Case Studies

Case Study Protocols

A series of case studies is being carried out in the project to examine how competency is being defined, measured or assessed, and applied utilizing standards for judging competence. The case studies are being carried out in two phases so the initial studies can be reviewed with the NPEC Council and by the Working Group before committing to the full scope of studies that would encompass most if not all of the areas reflected in the classification framework.

The Working Group emphasized the importance of focusing the case studies on data and "data ramifications." That is, the process of establishing and assessing competencies; how standards are set; how agreements concerning competencies were reached; measurement approaches that are used; leading ultimately to how data are analyzed, aggregated, compared, stored and retrieved. In this context, a clearer vision of the impact that competencies have on decisions and policy making can be developed. It was recognized that it would be necessary to probe the context for competency initiatives including the policy purpose served, the driving forces (e.g., legislative mandates, accountability demands, eligibility requirements), the perspectives and influences of key players, etc. if data ramifications are to be appropriately examined and interpreted.

The case studies will utilize a common format organized around the protocols and probes. Further, the case studies will extend beyond merely reporting what is being done. They will also explore where difficulties are encountered, what strategies are succeeding, and why certain choices were made while other options were rejected.

The protocols being used in the case studies are presented in Appendix A.

Case Study Sites

The Working Group identified potential case study sites within each area of the framework for classifying competency-based initiatives. Following are the possible sites identified by the Working Group:

- Entry into Postsecondary Education

(1) Competency-Based Admissions: *Oregon University System; SHEEO Studies of Colorado, Washington and Wisconsin; New Mexico Medical School*

(2) Competency-Based Placement: *Indiana University, Purdue University Indianapolis; ACT Compass Site; Wisconsin Data System*

- Within Postsecondary Education

(3) Competency-Based Curricula: *Alverno College; Kings College; New Mexico Medical School; Columbia University Dental School; North Carolina School of Veterinary Medicine; Sinclair Community College; Samford University; Air Force Training Program; Army MOS Program*

(4) General Education Competencies: *Alverno College; Kings College*

(5) Competencies at Transfer (Within Providers)

(6) Competencies at Transfer (Across Providers): *Colorado Electronic Community College; North East Missouri State University; TVA University; Motorola University*

- Exit from Postsecondary Education

(7) End of Program Competencies: *TVA University; Western Governors University; New Mexico Medical School; Columbia University Dental School; Sun Microsystems; Cisco Systems; Novell*

(8) Postsecondary to Employment (Work Place Competencies): *Hagerstown Community College; ACT Work Keys Site (Westark College); Sun Microsystems; Cisco Systems; Novell*

(9) Postsecondary to Graduate/Professional School

- Overall Institutional Effectiveness

(10) Internal (Program Improvement)

(11) External (Accountability, Performance Budgeting, Accreditation): *State of Missouri; Northwest Missouri State University*

Recognizing the limits on resources currently available for the case studies, and desiring to see the results of a limited set of case studies before committing to the full scope of possibilities, the Working Group decided to carry out the case studies in two phases.

Phase I of the Case Studies focused on refining the prototype Oregon University System study (including contrasting/integrating the SHEEO studies of competency-based admissions in Colorado, Washington and Wisconsin); Hagerstown Community College; Kings College; Sinclair Community College; and Western Governors University.

The goal was to complete as much of Phase I as possible by November 1 so that this work could be presented at the NPEC Council meeting. Drafts of the Phase I case studies were also reviewed at the December 2 and 3 meeting of the Working Group. The Working Group provided guidance with regard to refining the Phase I case studies and discussed the various data and policy issues that were addressed by one or more of the institutions examined in Phase I. The issues identified by the Working Group are presented in the next section.

The Working Group decided that the second phase of case studies would focus on a corporate educational program, a medical school, a military training program, the State of Missouri and Northwest Missouri State University; and Indiana University-Purdue University at Indianapolis. The final selection of four case study sites will be made by the consultant in consultation with the Working Group Chair after the consultant has had an opportunity to explore the receptivity and suitability of potential Phase II sites.

Defining and Assessing Competence--Data and Process Issues

As the Working Group analyzed the results of the Phase I case studies it compiled a list of the data and process issues that institutions encountered in implementing competency-based initiatives. Since a wide variety of initiatives were studied the challenges faced were quite different although a number of issues were common to some, if not all, of the case study sites. In some instances the Working Group felt that the issues were being effectively addressed, in other cases they illustrated the stumbling blocks that are encountered in defining and measuring competence. Further, some data and process issues that have been identified are more or less relevant in different contexts.

The following compilation of the data and process issues identified by the Working Group based on Phase I findings is presented in the form of criteria or a check list as opposed to good or questionable practices. Based upon the analyses carried out to this point it would be difficult to make judgments about best practices that would be uniformly applicable to all competency initiatives; indeed, it is unlikely that this will be possible even after the completion of all of the case studies and more in-depth review by the Working Group. In addition specific examples of data and process issues based on the case studies have not been included in the compilation that follows. This could likely be done although in certain instances it would be difficult to present the example in a positive light. Rather, the following data and process issues are presented in a form that hopefully would have utility as "things that institutions and states should carefully consider" as they planned or implemented a competency-based initiative.

I. Data Issues

A. Level at which competencies are defined (e.g., course, major, institution)

- Assessment processes are appropriate for the unit of analysis (e.g., course, major, institution) that has been chosen.
- The unit of analysis is relevant to the target audience(s).
- The unit of analysis is relevant to the decision-making or policy development context that is being addressed.

B. Linking Issues

- Definitions of competence are aligned with the goals of the learning experience. That is, the course or major, for example, is designed to result in the competencies identified.
- Assessment of competence is consistent with the goals of the learning experience. That is, assessment processes are designed to measure the desired outcomes of the course or major, for example.
- Assessment measures and results are relevant to the target audience.
- The data reported (i.e., assessment results) have utility for decisions (e.g., improvements in the learning process, informing consumers).
- Appropriate relationships are established between different assessment measures (and reporting procedures); for example, between "career transcripts" and "student development transcripts."
- Insights are gained by linking competence measures to activity measures, such as credit and contact hours.
- Definitions and measures of competence at one level are consistent with and build upon those used at other levels (i.e., across disciplines, courses, student levels and between general education courses and courses in the major).

C. Comprehensiveness Issues

- The extensiveness of the information that is developed and maintained through assessment of competence reflects the right balance between costs and utility. For example, costs and feasibility are carefully weighed in designing and retaining portfolios to document competencies.
- Cost-effectiveness trade-offs are made in supplementing or duplicating competency assessments; that is, in determining whether to simultaneously support a competence-based and traditional admissions process.

D. Measurement Issues

- Scales and scoring metrics or rubrics are meaningful and provide useful insights with regard to the competence being assessed.
- Consistent metrics are used in assessing different competencies. For example, applying different scales across several competencies could be misleading.

- Results of assessments are reliable and reproducible. That is, the same results are achieved when assessment procedures are repeated under the same circumstances.
- External data (e.g., LSAT, GRE, performance in graduate school, employer evaluations) are used to validate learning and competencies.
- Precision, reliability, validity, credibility, and cost are all considered in selecting locally developed versus externally/vendor developed assessment tests and measures.

E. Data Maintenance and Reporting Issues

- Data about competencies are cost-effectively maintained. For example, to what extent should assessment results, course grades, workplace experiences, etc. be incorporated in a student's career transcript or portfolio? Is it cost-effective to retain assessment results as part of traditional transcripts or in non-transcript data bases such as student follow-up files?
- Data about competencies are organized in ways that are meaningful to target audiences. For example, "mastery" is documented at a level that makes sense to employers. Complex, multi-dimensional arrays are avoided.

F. Portability Issues

- Meaningful comparisons of competencies can be made across the chosen units of analyses; for example, secondary schools, institutions, and states.
- Definitions of competence can be shared across the relevant units of analyses such as secondary schools, and colleges and universities.
- Assessment processes and measures can be replicated across disciplines and institutions.

II. Process Issues

A. Development Processes

- The goals of the competency development process are well defined, understood, and accepted.
- The processes of defining competencies, setting standards and determining how competencies are measured appropriately involve all relevant constituents (See B below).
- The timelines for defining competencies and standards, developing assessment procedures, training faculty and staff, etc. are sufficient to ensure credibility and success, but at the same time sustain momentum, commitment and interest.
- Long term financial support for the initiative is adequate, justified and feasible (See E below).
- The developmental process is portable; that is, it can be replicated at multiple institutions, or across multiple disciplines, if necessary.
- Steps are taken to ensure that the developmental process is credible to target audiences (e.g., students, faculty, employers, legislators, accrediting bodies).

B. Involvement Processes

- Faculty are involved in the development of competence definitions, standards and the development of assessment procedures. Careful consideration is given to the formal mechanisms for gaining faculty input, how faculty are named to carry out these responsibilities, how and when the faculty as a whole are involved/informed, etc.
- Incentives and support are provided to ensure effective faculty contributions. For example, faculty are given released time to compensate for their efforts. Also, faculty are given recognition and assurances of ownership.
- Students are encouraged to use information about competencies in making choices and in "self-assessment." Student awareness of their competencies is an important objective of the overall initiative.
- Student perspectives are appropriately considered in the development of competence definitions and standards. As individuals who use information about competencies students have input concerning what is included and excluded from specifications of competency goals.
- Involvement in the development of competence definitions, standards and the development of assessment procedures is recognized as a important step in gaining "buy in' and support of key constituents.

C. Training

- Faculty and staff are provided training in measuring competencies (e.g., in scoring and ranking techniques).
- Users are helped to effectively apply information concerning competencies in carrying out their decision-making and policy development responsibilities. For example, they are trained in how to interpret assessment results, how to consistently apply standards, and how to analyze the relationships between learning activities and competencies.

D. Implementation

- Competency assessments are reported to the target audience in a form that is meaningful and conducive to use in the intended decision-making or policy development process.
- All participating departments or institutions are capable of carrying out the planned definitional and assessment processes. For example, smaller institutions have the resources and capabilities to carry out assessments, maintain records, etc. in a manner envisioned by the overall plan.
- Checks and balances are built into the process to ensure reliability of data. Procedures for verification of scoring, ranking, and reporting are utilized. For example, efforts are made to ensure that faculty, admissions staff, etc. use the same definition of competence level for a given skill.
- Efforts are made to ensure the credibility of results. For example, timely information about definitions, standards, and assessment methodologies is provided to users.
- The initiative is periodically evaluated and the appropriate constituents are involved in and informed about the evaluation.

E. Costs

- The resource requirements to support the competency initiative have been analyzed and realistically projected. These resource commitments are justified in terms of the expected benefits and overall priorities of the institution.
- The budget needed to carry out the competency initiative is feasible and sources of support have been identified.
- Seed money requirements, external sources of seed money, the costs of "front end" incentives, faculty development costs, the costs of operating dual systems, etc. have been realistically projected.

As the Phase II case studies are completed this compilation of data and process issues will be refined and extended.

Integrating the Results into a Final Report

Upon completion of the case studies and the bibliography the Working Group will have examined a wide range of competency-based initiatives. The results of the case studies will have provided insights with regard to processes for establishing and assessing competencies, what strategies are successful and where difficulties are encountered. The case studies should provide a basis for drawing conclusions about principles and practices. In addition the Working Group will have considered key concepts and definitions related competencies during the course of its first meetings. These results will be woven together into a final report.

Clearly, major components of the final report will be based on the case study reports and the annotated bibliography. It is likely that an introductory section(s) would draw upon the key concepts and constructs considered by the Working Group during the course of its meetings. And a concluding section(s) would focus on the findings of the project and address principles and practices based upon the data and process issues identified in the preceding section.

The Working Group intends that its report would have an important role in a number of areas:

- To show the importance of competency initiatives in broader contexts such as economic development, technology-based instruction, and industry interests in competency certifications. To address questions of why competencies are important and likely to become more important.

- To reach important target audiences (e.g., presidents, board members, legislators) that are not likely to avail themselves of other work in the area of competency definition and assessment.

- To address terminology and definitional issues: What is a competency? How does it differ from a student outcome, skill, or ability? What is the relationship between performance, assessment, and standards?

- To establish a set of "principles" or criteria that could be used by institutions or states that are planning or implementing competency-based initiatives.

Initially, the Working Group discussed addressing these objectives through an early, very brief publication or "primer." However, the Working Group decided that these objectives could best be achieved within its final report as outlined above. It may be possible to separately disseminate an executive summary of the final report as a "primer" or project overview.

The target audience for the final report would be academic leadership, particularly those administrators and policy-makers at the state and institutional levels who are involved in implementing or planning competency initiatives.

Timelines

July 1999 – December 1999: Phase I Case Studies and Bibliography completed

November 1-3: Work of the project presented at the NPEC Council meeting

December 2-3: Third Working Group meeting

January 2000: Project status and proposals for future work presented to the NPEC Steering Committee

April 2000: Drafts of Phase II Case Studies completed

July 2000: Fourth Working Group meeting

September 2000: Final Project Report completed

Appendix A

CASE STUDY PROTOCOL

Thank you for meeting with me today. As you know, I am interviewing you as part of a NPEC [explain NPEC if needed] project studying the data ramifications of competency-based initiatives.

1. What is your name and position? How have you been involved in [NAME OF COMPETENCY-BASED INITIATIVE]?

2. Why did you decide to use a competency-based model?

   Probe: What did you want to change?

3. Describe how competencies are used in the [NAME OF COMPETENCY-BASED INITIATIVE] process.

   Probe: Were competencies particularly useful? If yes, how? If not, why not?
   Probe: Contrast the use of competencies with how the process was traditionally done.
   Probe: Is the competency-based process optional or required?

4. How were the competencies developed?

   Probe: Were competencies created from scratch or were they based on work done elsewhere?
   Probe: Are there any particular problems with "home-grown" competencies?
   Probe: How do you know if you have selected the appropriate competencies?
   Probe: At what level of specificity are the competencies expressed? Are they expressed numerically or qualitatively? Do they include cognitive and affective competencies? Are attitudes or dispositions included among the competencies?
   Probe: Can the competencies ever change? What process is involved?

5. Who provided leadership in the development of the competencies? What groups were involved? Do these groups remain responsible for the competencies? What challenges did you encounter in this development process? What worked particularly well?

6. How are the reliability and validity of these competencies ensured?

   Probe: What data are being gathered? Do you have examples of data that you could share with us?
   Probe: Who evaluates the quality of the data? Or, Who decides whether levels of reliability and validity are good?

7. How are you measuring the identified competencies?

   Probe: What types of assessments are used?
   Probe: Do scores ever "expire"? Are they "date-stamped"?
   Probe: What challenges do you encounter in this measurement/assessment process?
   Probe: What works particularly well or what are your successes with assessment?

8. Are competencies linked structurally throughout the institution or organization? How? (For example, do program competencies guide course competencies?)

9. Are these competencies transportable? How do you ensure transportability?

10. What advice would you provide to colleagues at other colleges who want to develop and implement a competency-based curriculum? (What policies needed to be altered in order to accommodate using competencies?)

11. What would you do differently if you were to start over?

12. Is there anything else you would like to share about this competency-based initiative?

Thank you for your time. We appreciate your willingness to be interviewed.